



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/639,290	08/15/2000	Kenneth M. Prockup	82626	1561

7590 03/12/2002

Office Of Counsel Ron Billi  
Naval Air Warfare Center Aircraft Division  
Bldg 435 Suite A Unit 7  
47076 Liljencrantz Rd  
Patuxent River, MD 20670

EXAMINER

DAVIDSON, DAN

ART UNIT

PAPER NUMBER

2651

DATE MAILED: 03/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/639,290

Applicant(s)

PROCKUP, KENNETH M.

Examiner

Dan I Davidson

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6, 7 and 9-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 7 and 9-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.53(b)***

1. The request for a Continuation Application of parent application Serial No. 09/100,701 under 37 CFR 1.53(b) filed on August 15, 2000 is acknowledged.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Andersen (4,891,716).

Re claim 1; Andersen discloses a system for analyzing the performance of a tape recorder (Fig. 2) having a record input (Fig. 2, 32) and a playback head providing an output thereof (Fig. 2, 36), the system comprising: a signal generator (Fig. 2, 46, 40) comprising a serial arrangement of a microcontroller (Fig. 2, 46) and a digital-to-analog converter (inherent given that the programmable signal source 40 supplies an analog waveform, and therefore a DAC would be required to interface between the microcontroller and the programmable signal source) for generating the presence of a predetermined waveform for a predetermined duration which is routed to the record input of the tape recorder (Fig. 2, 40, 30, 32; col. 4, lines 29-32); an ADC receiving the

Art Unit: 2651

output of the playback head and providing a corresponding digital signal thereof (Fig. 2, 42); a digital signal processor that receives the digital signal and converts it into digital data representative of elementary components thereof (Fig. 2, 44; col. 4, lines 55-58); and means for receiving and analyzing the digital data to determine the performance of the tape recorder (Fig. 2, 46; col. 4, lines 61-65).

Re claim 3; Andersen discloses that the signal generator comprises: a microcontroller having an accessible and retrievable look-up table defining the predetermined waveform in a digital format (col. 4, lines 65-66; predetermined waveform is defined in that the set of required response values disclosed would of necessity be the components of the predetermined waveform, since required response values must match the recorded signal); and a DAC receiving the retrievable predetermined waveform and providing a corresponding analog signal thereof (inherent as discussed above with reference to claim 1).

Re claim 6; Andersen discloses that the digital signal processor utilizes a FFT to convert the digital signal (col. 4, lines 54-55).

4. Claims 1, 3, and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Cabot (5,420,516).

Re claim 1; Cabot discloses a system for analyzing the performance of a tape recorder (col. 5, lines 33-36; tape recorder mentioned as a possible device under test (DUT)) having a record input and a playback head providing an output thereof (inherent features in a tape system), the system comprising: a signal generator comprising a serial arrangement of a microcontroller (i.e. CPU) and a DAC for generating the

Art Unit: 2651

presence of a predetermined waveform for a predetermined duration which is routed to the input of the DUT (Fig. 1, 16, 10, 18, 20; col. 4, lines 52-55); an ADC receiving the output of the DUT and providing a corresponding digital signal thereof (Fig. 1, 24, 26); a digital signal processor that receives the digital signal and converts it into digital data representative of elementary components thereof (Fig. 1, 16; col. 6, lines 3-14); and means for receiving and analyzing the digital data to determine the performance of the DUT (col. 8, lines 16-48).

Re claim 3; Cabot discloses that the signal generator comprises a microcontroller having an accessible and retrievable look-up table defining the predetermined waveform in a digital format (col. 4, lines 52-55); and a DAC receiving the retrievable predetermined waveform and providing a corresponding analog signal thereof (Fig. 1, 18).

Re claim 6; Cabot discloses that the digital signal processor utilizes a FFT to convert the digital data (Fig. 1, 16).

Re claim 7; Cabot discloses that the signal generator repeatedly generates the predetermined waveform during the predetermined duration (col. 5, lines 49-51; implicit that predetermined waveform repeatedly generated).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2651

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cabot (5,420,516).

Re claim 9; Cabot discloses the limitations at parent claim 1 as discussed above. Cabot further discloses a display device having means to be responsive to and serviced by the means for receiving and analyzing the digital data (Fig. 1, 28). Cabot does not disclose having a plurality of display devices. However, given no unexpected results, there is no patentable distinction between having a single display device and multiple display devices. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have more than one display device in Cabot; motivation being the ability to display more information.

Re claims 10-11; all the limitations at these claims are satisfied by Cabot as discussed above including the limitation that the look-up table comprises a selectable predetermined waveform in a digital format with the exception of the limitation that there be a plurality of selectable predetermined waveforms. Given no unexpected results, there is no patentable distinction between having a single selectable predetermined waveform or a plurality of selectable predetermined waveforms (since a memory could very easily hold a single selectable predetermined waveform or a plurality of selectable predetermined waveforms). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have a plurality of waveforms; motivation being an opportunity for the user to specify different specifications for testing the DUT.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen (4,891,716).

All the limitations at this claim are satisfied by Andersen as discussed above including the limitation that the look-up table comprises a selectable predetermined waveform in a digital format with the exception of the limitation that there be a plurality of selectable predetermined waveforms. Given no unexpected results, there is no patentable distinction between having a single selectable predetermined waveform or a plurality of selectable predetermined waveforms (since a memory could very easily hold a single selectable predetermined waveform or a plurality of selectable predetermined waveforms). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have a plurality of waveforms; motivation being an opportunity for the user to choose from different waveforms for calibrating the tape recorder.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen (4,891,716) as applied to claim 1 above, and further in view of Webb et al (3,567,861).

Andersen does not disclose having a buffer amplifier interposed between a signal generator and a record input of the tape recorder. This is taught by Webb et al (Fig. 2, 66; col. 5, lines 18-22). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have a buffer amplifier between a signal generator and a record input of a tape recorder in Andersen; motivation being not loading down the signal provided the record input of the tape recorder.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cabot (5,420,516) as applied to claim 1 above, and further in view of Webb et al (3,567,861).

Art Unit: 2651

Cabot does not disclose having a buffer amplifier interposed between a signal generator and a record input of the tape recorder. This is taught by Webb et al (Fig. 2, 66; col. 5, lines 18-22). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have a buffer amplifier between a signal generator and a record input of a tape recorder in Andersen; motivation being not loading down the signal provided the record input of the tape recorder.

### ***Conclusion***


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan I. Davidson whose telephone number is (703) 308-8535. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth, can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

DID  
Dan I. Davidson

March 4, 2002

  
DAVID HUDSPETH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600